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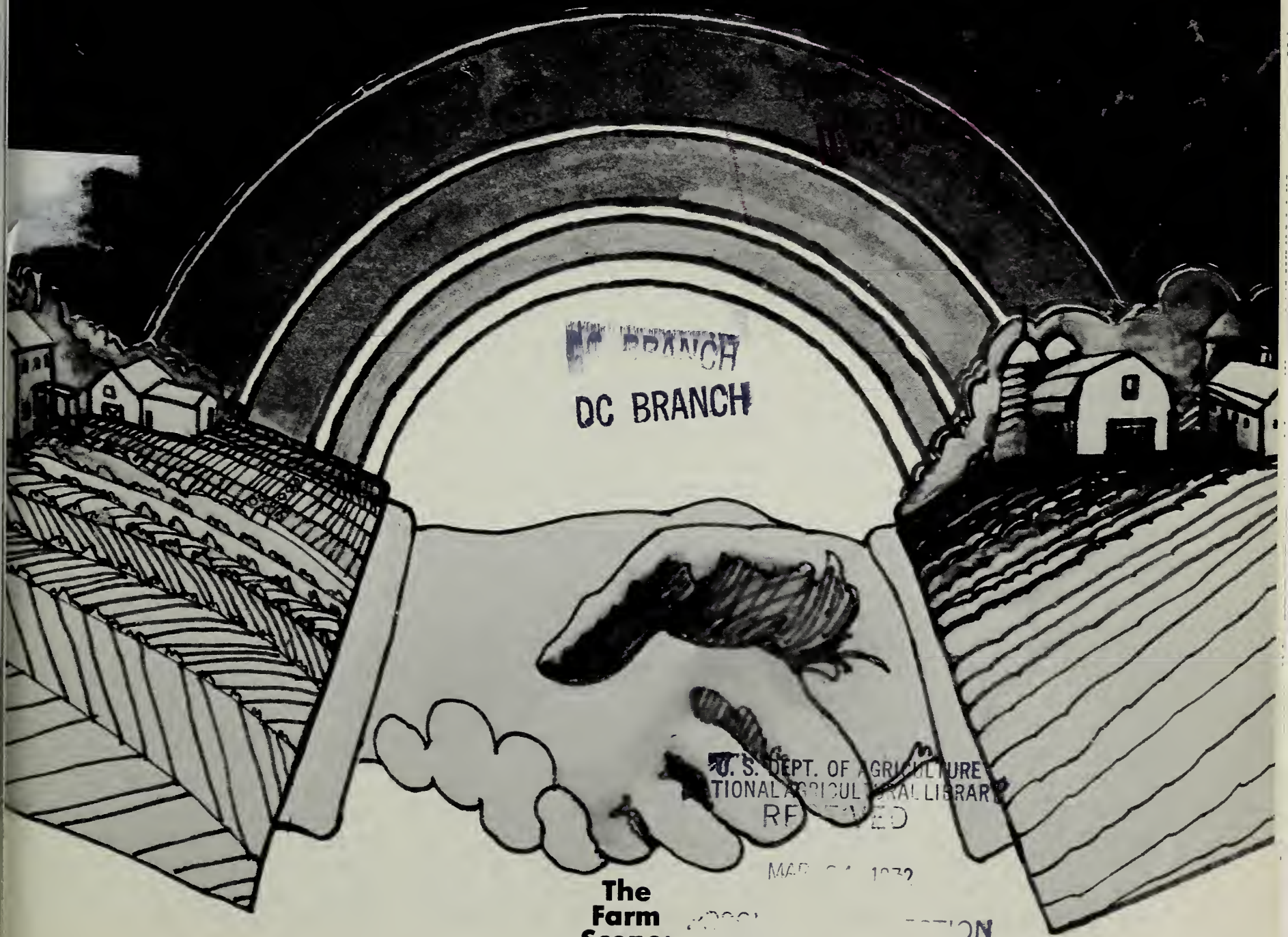
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THE FARM INDEX

U.S. Department of Agriculture/January 1972

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**The
Farm
Scene:
Where
Partnerships
Fit In**

2000
CURRENT CENSUS RECORDS

The hatches are not yet battened down on those U.S. feed grain shipments to the USSR. In mid-December, USDA was talking a minimum of 2.4 million metric tons of U.S.-produced barley, oats, and corn.

That's the volume tied to a CCC sales agreement. U.S. exporters agreed to sell the Russians additional grain which may or may not be of U.S. origin.

The minimum figure includes half as much barley as we exported in 1970 to all markets combined, and substantially more oats than were exported that year.

The corn prospects, as recently stated by Assistant Secretary Clarence Palmby before a House Agriculture Subcommittee: "Corn farmers, in particular, will benefit from an additional export market that is sure to amount to approximately 50 million bushels and could reach 80 million bushels, or nearly 16 percent of last year's (1970) total corn exports."

The U.S. corn minimum of around 50 million bushels is reasonably assured by the arrangement worked out between USDA and the exporters.

Last October, when Continental and Cargill grain companies told USDA about a Russian offer to buy feed grains, the Department informed the exporters it hoped much of the sales would be U.S. corn or grain sorghum from private stocks. The USSR, however, wanted some volume of barley and would also take some oats.

USDA speculates the Russians' reluctance to buy corn and sorghum exclusively may have something to do with Soviet feeding practices, which favor grains high in fiber. Too, it's possible USSR producers lack the know-how for feeding high percentages of corn to livestock. Also, the Russians may not have the necessary processing equipment, especially for grain sorghum.

USDA then decided to offer CCC barley and oat stocks for export on competitive bids. The terms agreed to by exporters—for every ton they bought, they'd export an equivalent

amount of U.S. corn and/or sorghum from open market stocks.

In all, the CCC sold to the successful bidders—Continental and Cargill—about 1.2 million metric tons of oats and barley. Under the ton-for-ton agreement, 1.2 million will also be the minimum shipments of U.S. corn and/or sorghum.

As specified in their contracts with CCC, the two exporters are obligated to ship as follows:

		Amount (mil. bu.)	Delivery
Continental of N.Y.	oats	20.65	Thru July
	barley	27.5	Thru Oct.
	corn	35	Thru Oct.
Cargill of Minn.	oats	3.5	Thru July
	barley	11.5	Thru July
	corn	12	Thru Dec.

Any corn shipments above the 47 million bushels depend on what exporters decide to do about their contracts that don't involve the CCC. Continental, for one, has a contract with the USSR to supply an additional 43.3 million bushels of corn. Continental's contract with the CCC does not require this grain be shipped from the U.S.

Assistant Secretary Palmby foresees an upward trend in feed grain imports by the USSR. One indication is that country's goal to increase output of animal products. The latest Five Year Plan, for 1971-75, calls for a 27-percent growth in both meat and egg production and 19 percent in milk. The goals for feed production, considerably less, are a 10-13-percent increase in grains and about 15 percent in sunflowerseed.

"It seems obvious," Palmby told the House Subcommittee, "that if the animal product goals are attained, substantial imports of livestock feed will be necessary.

"This, plus import demands in Central Europe, is the market with which we are concerned when we discuss feed grain sales to Russia. It is all cash business and, it is well worth seeking."

The economy appears to be gathering steam as the new year begins.

Retail sales are brisk. Housing construction has been showing strength, with interest rates easing and Government support increasing. Advances in disposable personal incomes have been substantial in the past year despite relatively high unemployment rates. And price increases have slowed.

In the months ahead, stronger private investment plans, expansion in consumer spending, and larger Government expenditures point to greater economic activity.

Businessmen—encouraged by growing sales, lower interest rates, better liquidity positions, accelerating profits, and investment tax credit incentives—will likely expand their operations, replenish stocks of finished goods, and modernize their facilities in 1972.

The buildup in personal savings over the past several years has swollen the consumers' buying potential. And slower price advances would help to induce increased consumer buying, particularly of "big ticket" items, normally postponed in periods of uncertainty.

These factors will encourage sales of food and other farm products: The recent increase in personal income tax exemptions; the repeal of the auto excise tax; gains in consumer after-tax incomes; the Food Stamp Program; and a probable decline in unemployment.

In general, the farm outlook is good.

Livestock prices, buoyed by active demand, are running above a year ago and will remain strong into mid-1972. Fed cattle marketings will likely expand this winter with lower feed costs and higher prices for cattle.

A tapering in the rate of hog slaughter is keeping hog prices above a year earlier, though they're declining seasonally. Slaughter will probably continue to contract into early 1972.

Gains in egg production have narrowed recently as producers trimmed layer numbers. Producer prices, though under 1970's, lately have strengthened and may keep improving in '72. Turkey prices have picked up to year-ago

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levels because of a reduced fall slaughter.

Broiler output is outpacing that of a year earlier, and prices are low. However, as competition from red meats eases in coming months, winter prices may average higher than in the 1970/71 season.

Milk production continued to advance about 1 percent over 1970 levels, and is likely to rise again in 1972. With higher average prices—by about 16¢ per cwt.—cash receipts to milk producers in 1971 are estimated at around \$6.8 billion.

Expanded acreage and increased yields pushed the 1971 grain harvest to a record high. Grain prices have fallen, but reduced carryovers, greater utilization, and increased loan levels are expected to cushion the impact on crop prices. As a result, crop prices will probably hover near year-earlier levels in coming months.

The total feed grain crop, boosted by a record corn harvest, is substantially larger this year and prices have dropped since early summer. In addition to the loan program, USDA has announced it will buy corn on the open market to help improve prices to producers. Some 1.4 million bushels were purchased the second week in December.

Soybean supplies, limited by a reduced carryin, are somewhat smaller in 1971/72 despite a large 1971 crop. Strong domestic and export demand continues to shore up prices. They are expected to average moderately above the \$2.85 a bushel of last season.

The cotton carryover will probably shrink again next summer, despite increased production and lower disappearance this season.

Canned and frozen vegetable supplies may be the smallest since 1967, indicating generally firm prices in 1971/72. Only a slight increase in citrus production and good demand indicate relatively strong grower prices.

FARM

FOREIGN

MARKETING

RURAL

CONSUMER

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The Farm Scene: Where Partnerships Fit In

In some ways farm partnerships are bigger than either sole proprietorships or corporations, but there's much we still don't know about these joint farm ventures.

As farm businesses go, the gross receipts of partnerships average three to four times those of sole proprietorships.

Their annual cash receipts—around \$5 billion—account for nearly a tenth of the national gross from farming.

Typically they're father and son operations or maybe two or more brothers or other close relatives.

They outnumber farm corporations by five to one, and their total sales are almost as big as the corporations'.

Over 100,000 farm businesses are

operated as partnerships, according to farm tax returns filed with the Internal Revenue Service.

In 1967—latest year with a breakdown by types of businesses—the 114,000 farm partnerships surpassed the sum total for the hotel and motel trade, holding and investment companies, and eating and drinking establishments. Even comparing lawyers' partnerships with farmers', the latter had four times as many in 1967.

The 1969 Census of Agriculture bears further testimony to the importance of farm partnerships. Early returns from 12 States (including the leading farm States in the Corn Belt and our No. 1 dairy State) reveal that 10 to 15 percent of all commercial farms are run as partnerships. They also operate roughly 15

percent of the land in farms in the 12-State area. In Indiana and New Jersey, however, they operate as much as a fifth of the farmland.

By contrast, the Census reports corporations control less than 2 percent of the farmland in these 12 States. The exception is New Jersey, where the proportion is nearly 10 percent.

This is the first time a Census of Agriculture gleaned data about type of farm organization. Respondents were instructed to record as a partnership only "legal partnerships," and not those farms run by husband-wife teams.

What kinds of farm enterprises readily lend themselves to partnerships? How do the partners usually figure out the value of their contributions to the business, and

how do they divide the profits? Is the partnership a steppingstone from sole proprietorship to corporation?

These questions have not been researched for the most part, but the answers would doubtless prove helpful to farmers giving consideration to a partnership deal. To the thinking of some economists, it's hard to say for sure what type of farm organization would best suit individual situations until we know more about the arrangements in being; i.e., which ones work best under what circumstances.

In theory at least, the advantages of forming a farm partnership would seem to be several.

For one, the arrangement enables the partners to put to work the specialized skills they know best. One may bring to the business capital and expertise in finance, another in labor relations, and the others in such technical fields as agronomy and animal genetics. Partnerships at the same time can provide a bridge for passing a farm from one generation to the next.

Suppose a farmer has built up a fair-sized business in crops and livestock and has two sons who'll eventually take over the operation. One son, after working on a salary basis for several years, proves to be a good man with crops. So the father puts him in charge of crop operations and gives him a percentage interest in a partnership.

The No. 2 son, meanwhile, was majoring in animal husbandry at a land grant college. He returns to the farm as a partner and handles the hog enterprise.

The role of the father, besides being chief controller of the farm's assets, is that of general manager. He buys farm inputs, makes financial decisions and marketing transactions, and coordinates the crop and livestock ventures.

Through what's called a buy-sell agreement, the sons may buy the father's share of the business when he retires. Payments are usually

(Please turn to Page 6)

COURT SCENE: PARTNERSHIPS TAKE THE STAND

Q: What's a legal partnership?

A: Ask the man who's got one.

The trouble with this advice is that one man's partnership may be structured quite differently from the next guy's. And not all the so-called "partnerships" would hold up in a court of law. On the other hand, it's entirely possible to be operating a legal partnership and not know it.

Most frequently, the existence or nonexistence of a partnership becomes an issue when a creditor goes to collect a debt from an associate of the debtor. If that associate is proven to be a copartner in business, the law says he's responsible for the debts incurred by his partners.

"Is this a partnership?" is often asked by the income tax people. Partnerships allow the members to file separate tax returns. Thus, total tax paid on business proceeds may be lower than otherwise.

In the case of *Commissioner v. Culbertson*, a father and his four sons bought into partnership in the cattle raising business. The sons' payment for their share of the partnership was a note paid out of profits and gifts from the father. In the tax years 1940 and 1941, two of the brothers went into the military. The other two brothers were minors still in school.

The Tax Court ruled the sons could not be recognized as partners, since they contributed neither vital services nor capital to the business. The case finally went to the Supreme Court, which ordered it back to the Tax Court to find out if there was a bona fide intent to form a partnership. The Court found no bona fide partnership was intended.

The main body of law for deciding partnership cases is the Uni-

form Partnership Act. Now in force in 38 States, the Act defines a partnership as "an association of two or more persons to carry on as co-owners a business for profit."

Another often quoted definition: "The requisites of a partnership are that the parties must have joined together to carry on a trade or adventure for their common benefit, each contributing property or services, and having a community of interest in the profits" (*Meehan v. Valentine* 145 U.S. 611).

Partnerships can be in writing, made orally, or sometimes neither. The mere fact a business has the essential traits of a partnership can make it one in the eyes of the law.

As shown in the case of *Commissioner v. Culbertson*, law courts are generally less interested in how the parties in partnership describe their association than in whether they intend their association to include the essential elements of partnerships. One such element is the expressed purpose to make a profit from the business.

Also seemingly essential is the sharing of profits, but profit sharing alone doesn't make a partnership. Take the example of a tenant farmer who pays rent as a share of his gross profits. This would probably not be judged a partnership if there were no joint ownership of anything besides the commodities produced, no sharing of the losses, and no joint control over the details of farm operations.

Among other characteristics of partnerships, the partners must share in the management. Another element sometimes considered by the courts is the co-ownership of property. (2)

spread over 5 years or more, thus providing the retired father with a steady source of income while gradually transferring ownership.

Another advantage of partnerships is that they usually entail sharing the risks in business, as well as the profits.

Also, partnerships can be the first step to incorporation. When the business grows to such size as to warrant incorporation, the partners can exchange their equities for stock. The new corporation carries some advantages, including limited liability for the shareholders. Moreover, for tax purposes the corporation can be treated as a partnership as long as there are 10 or fewer shareholders.

Among the disadvantages of partnerships: they are more complex than sole proprietorships when it comes to accounting and reporting income; they demand harmonious relationships among all members and fulfillment of responsibilities (each partner, for example, is held legally responsible for financial obligations of the other partners); and the death or withdrawal of one partner automatically dissolves the partnership. (1).

Corporative Land Buyers Mostly Family Concerns

For the names of corporations buying the most farmland, don't look in *Standard & Poor's*.

The majority of corporate purchases of farm real estate are made by privately held farm corporations. As such, they're not listed on the stock exchanges or the over-the-counter market.

The latest data on corporation purchases of farmland are for the year ending March 1, 1969. Assuming little change in the percentage since then, the private family corporations in 1970 bought 4 out of every 5 acres acquired by corporations as a group.

All corporations in 1970 bought an estimated 3 million of the 18.5 million acres of total farmland purchases. Of the corporations' 3 million acres about 2.4 million were bought by private family corporations and the balance by publicly held corporations.

Both kinds of corporations also sell land. Net acquisitions (purchases less sales) came to about 1.5 million acres in 1970, 1.1 million for the private family corporations and 0.4 million for the publicly held corporations.

Much of the nonurban land owned by publicly held corporations has limited capability for agricultural use.

For an idea of how public corporations use rural real estate, ERS examined some operations with extensive land holdings.

Several distinct types of corporations can be identified. One group consists of the major lumber, pulp, and paper companies.

They own about a tenth of all forest lands. They generally acquired their holdings over a long period, and use them to provide raw materials for their manufacturing activities. In recent years, a number of these companies have converted some acreage to recreation and second-home communities. In a few cases, land originally bought for forestry has been turned into farmland, although comparatively little of this land is well suited for agriculture.

The petroleum industry also has substantial holdings of rural land, acquired originally for oil and gas exploration. However, several firms have holdings in California's Central Valley, where efforts are being made to develop these lands for agricultural uses.

The surface mining industry—primarily coal, sand and gravel, and gold—uses about 70,000 acres of land annually. Through the years, about 3.2 million acres of rural land have been disturbed by all surface mining activities.

About two-fifths of this acreage has been affected by strip coal mining operations. Coal mining companies have retained ownership of about half of this acreage. The rest is in farms and ranches, or owned by other interests.

Railroads received land grants from the Federal and State Governments, totaling about 131 million acres, to help them build the main lines to the west coast. Most of this land has long since passed to other hands, but several railroads still own a small part of the total acreage they received. It is mostly in the western States and is leased out to ranchers.

Relatively speaking, the land development and construction firms are

CENSUS COUNTDOWN—FARM PARTNERSHIPS V. CORPORATIONS

State	Partnerships	Corporations	Partnerships as percent of:*		Corporations as percent of all land in farms*
			All farms	Land in farms	
— — <i>Number</i> — —			— — — <i>Percent</i> — — —		
Illinois	14,953	598	15	18	1.3
Indiana	10,486	584	16	20	1.6
Iowa	16,965	621	14	17	1.2
Minnesota	10,353	460	12	15	1.1
Wisconsin	8,964	569	12	14	2.6
Michigan	5,227	277	12	16	1.6
North Dakota . .	5,806	97	14	17	0.4
New Jersey . . .	707	251	13	19	9.6
New York	3,676	538	11	14	2.7
Pennsylvania . .	3,949	389	10	13	2.6
Missouri	11,032	546	13	17	1.6
South Dakota . .	4,850	262	12	16	3.7

*Based on numbers and acres in farms of Economic Classes I-V only. SOURCE: 1969 Census of Agriculture.

newcomers to the farm real estate market. Some are major manufacturers of building materials and supplies that have launched joint ventures to develop new towns and communities.

Other joint ventures involve agriculture, such as an 80,000-acre farm in California recently acquired by two firms specializing in aluminum and life insurance. Substantial acquisitions in Florida have been put to similar uses, particularly citrus groves and livestock ranches, until the land can be converted to urban use.

Of individual companies that hold and operate agricultural lands, the largest number by far are engaged in production of specialty crops such as sugarcane, vegetables, and citrus, and in ranching. Many of these firms are also processors of agricultural products. (4)

Uncle Sam No. 1 Land Owner

The Federal Government still owns about one-third of the 2.3 billion acres of land in the 50 States.

Nearly half of the 763 million acres of Federal lands are in Alaska, accounting for about 97 percent of the total land area of the State. But Federal ownership is also important in several of the "south 48" States: 87 percent of Nevada, 66 percent of Utah, and 64 percent of Idaho.

Although many agencies in the Federal Government own some land to carry out their specific functions, more than 99 percent is administered by three Departments—Interior, Agriculture, and Defense.

Most of Interior's lands are under the Bureau of Land Management. The BLM is responsible for about 476 million acres, of which 300 million are in Alaska.

In USDA, the Forest Service is the primary land agency with 187 million acres.

The Defense agencies, including the Corps of Engineers, use 31 million acres.

Practically all of the Federal lands are range and forest lands. Only about 400,000 acres are suitable for crops. (5)

Inflation And The Farmer

National inflation tends to depress real farm income because its impact is greater on prices paid by farmers than on prices they receive.

That's the synopsis of an ERS study to measure inflation's effect on all components of farm costs, revenues, and value of assets.

The report, done in cooperation with Oklahoma State University, is based on what the economists call static economic analysis and on a dynamic simulation model. (Briefly, "static analysis" assumes a one-time increase in price inflation. "Dynamic simulation" assumes year-after-year or piled-on increases.)

The economists first isolated the important supply and demand variables that largely determine all prices. They were then able to examine how inflation alone influences prices and income in the farming industry.

The report shows that increases in prices received by farmers in recent years are primarily due to population growth and other demand and supply factors. However, any increase in total demand stemming from national inflation appears to be completely offset by higher costs in the marketing sector: inflation per se leaves virtually unchanged the current dollar prices farmers get for their commodities.

But each 1 percent increase in inflation raises prices *paid* by farmers .6 percent in the short run (about 2 years) and 1 percent in the long run (many years).

The study calculates that for every 10-percent increase per unit in prices paid by farmers for production items (including interest, taxes, and wage rates), farm net revenue is reduced 12 percent in about 2 years and 3 percent in many years.

The model indicated to the economists that farmers respond to these higher prices by cutting back on use of certain inputs. By so doing, farmers' production generated by these inputs declines. This tends to raise

prices received and offset inflation in prices paid. The supply adjustment offsets 30 percent of inflation's input-price impact on net farm income in the short run, and 80 percent in the long run.

The impact of inflation is by no means uniform among farm inputs. It's less for inputs for which the demand is relatively elastic; i.e., use of them changes in response to changes in price. One example is fertilizer.

Farmers as a group can get by with less fertilizer when prices go up. In fact, the ERS study concludes that, theoretically, net income from farming would increase with lower fertilizer use. Again, the reason is that farm output would drop, and this would strengthen agricultural prices. The price effect would more than offset any net revenue loss from lower output or from higher fertilizer prices.

By contrast, demand for real estate, labor, and durables—like machinery and breeding stock—is relatively inelastic. Demand is fairly steady, regardless of hikes in taxes, wages, and interest rates caused by inflation. Inflation of these input "prices" seriously disadvantages farmers.

The dynamic analysis of "piled on" inflation indicates that annual inflation in farm input prices cannot much exceed 2 percent if the farming industry is to maintain its net farm income.

Turning to other effects of inflation, the study notes that most farmers own considerable assets and are now in a net debtor position. They tend to benefit from some inflation to the extent they can sell assets at inflated prices and reap capital gains while paying back debts with money that is worth less than when the debts were assumed.

The real wealth gains stemming from such benefits averaged \$1.5 billion in the inflationary years 1969 and 1970. This gain, though substantial, is small by comparison to the likely improvements in net income resulting from lower inflation. (3)

CANADA 1975



Highlights of the agricultural prospectus as seen by ERS: Some growth in Canada's wheat output but not of the likes of the mid-1960's . . . a big leap for beef but barely enough to cover the needs.

Canada—the world's second largest wheat exporter after the U.S.—is making a determined effort to de-emphasize wheat production and to accentuate production of coarse grains, oilseeds, and livestock.

A new ERS study says the developments to the north will exert a major impact on world agricultural trade and markets through 1975.

Canada's best customer for agricultural products is the U.S. Yet in the arena of world exporters, the two countries are strong competitors, particularly in such markets as the European Community and Japan.

ERS reports that Canadian wheat production is down from the level of the mid-1960's. Both coarse grains

and beef production are rapidly increasing. "Recent government policy changes tend to reinforce these trends," says the ERS study.

A precipitous drop in Canadian wheat exports in the 1967 marketing year set the stage for a rethinking of official policy towards wheat vis-a-vis other farm commodities. Exports that year plunged 35 percent from the 1966 level—to 9.1 million metric tons, the smallest in 5 years.

A combination of events worked against Canadian sales in the late 1960's. For one, the USSR—a big buyer of Canadian wheat—had several good wheat crops and didn't need as much from Canada. Other importers had also become more self-sufficient in wheat. But, it was also true that competition in the world market was stiffer than formerly.

As the 1960's wore on, some of Canada's traditional importers switched to lower priced wheat from

other suppliers. Too, the new baking techniques that emerged in the sixties meant bakers did not require as much high-protein content wheat. But they did require a guarantee of minimum protein content on the high protein wheat they did use. Canada's otherwise excellent wheat grading system was such that it could not provide such a guarantee.

Today, the Canadian Wheat Board's grain delivery quota system is less biased in favor of wheat. And the Prairie Grain Advance Payments Act for farm-stored grain has been amended to make the advance payments on barley and oats more favorable relative to payments on wheat.

Compared to 1967, Canadian grain export marketing has become noticeably more aggressive. Export pricing has become increasingly competitive for barley and oilseeds. Concessional credit terms are being offered to less developed countries that Canadian

exporters had previously neglected. A new protein grading system, launched in 1971, is designed to recapture traditional markets that had been lost during the 1960's to competing exporters.

Increased livestock production is encouraged in the Prairie Provinces by the federal government's forage incentive program. In addition, several provincial governments have their own incentive programs to increase livestock production.

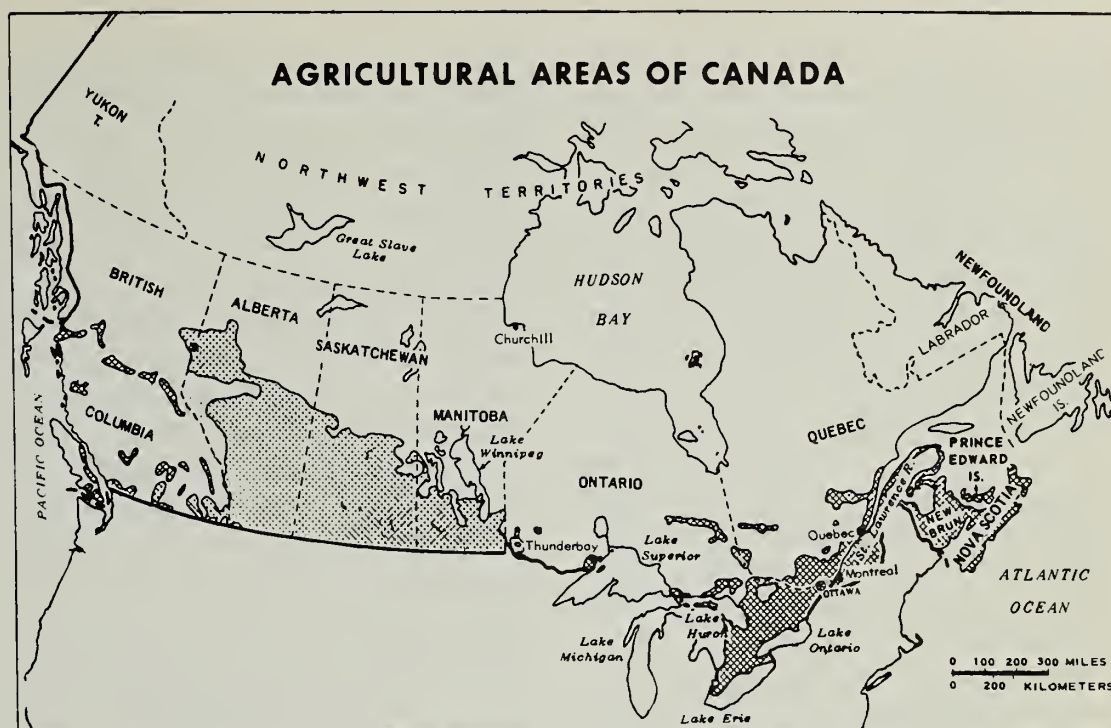
The new ERS study examined these programs, production and price trends, and many other indicators to project the supply of Canadian grains and livestock in the year 1975. Projections for selected commodities are shown in the accompanying table.

Wheat. By 1975, wheat production will increase somewhat from the levels of 1970 and 1971. However, it will not reach the levels of the mid-1960's. Wheat production will be retarded mainly by limited export opportunities, which are reflected in restricted marketing quotas and lower prices to producers. Wheat's relative importance in the crop mix will diminish further in the 1970's, but it will doubtless remain the No. 1 commodity in the Prairie Provinces of Alberta, Saskatchewan, and Manitoba. Of Canada's total wheat output in the 1960's, 97 percent came from these three provinces.

Barley production will be up considerably in 1975 assuming export demand continues brisk. If so, the export availability in 1975 will be even greater than the record exports of 1970/71. Barley yields have been increasing faster than wheat yields, and barley is a good alternative to wheat in the Prairies.

Oats. Output will continue to decline and domestic use will match production.

Corn. It has potential for expanding in Eastern Canada. If prices stay at recent levels, 1975 output will grow enough to cut import requirements in half. However, if prices decline by 15 percent, import requirements can be expected to climb.



Beef. The surging demand will not let up during the 1970's, and beef production will increase greatly. But production will barely be able to meet the heavy demand. The shortfall will be made up by higher imports, as opposed to a decrease in exports of beef and live cattle to the

important U.S. market.

Output gains will be restricted by (1) limited resources of forage and pasture, (2) herd depletion in the late 1960's, and (3) the steady drop in dairy herd numbers.

The growth in the beef breeding herd will be in Western Canada—

CANADA: 1975 PROJECTIONS FOR SELECTED COMMODITIES

	Wheat	Barley	Oats	Corn	Beef	Pork
	Million acres				1,000 head	
Area and livestock numbers						
1967-69 average	28.2	8.8	7.5	0.9	3,310	9,039
Alternative A ¹	24.5	11.6	5.9	1.5	3,881	9,767
Alternative B ²	22.1	11.6	5.9	1.3	3,881	10,047
	Bushels per acre				Carcass wt.	
Yield ³						
1967-69 average	22.8	36.0	45.8	81.3	543	129
Alternative A	27.6	45.4	49.4	94.5	565	129
Alternative B	24.7	37.8	47.2	80.2	565	129
	Million bushels				Million lbs.	
Production						
1967-69 average	642	317	346	76	1,798	1,166
Alternative A	676	527	291	142	2,193	1,260
Alternative B	546	439	279	104	2,193	1,350
Domestic disappearance						
1967-69 average	168	242	331	108	1,795	-1,102
Alternative A ⁴	186	338	289	157	2,282	1,246
Alternative B ⁵	186	367	279	157	2,282	1,246
Export availability						
1967-69 average	474	75	15	-32	— 3	64
Alternative A	490	189	2	-15	-89	14
Alternative B	360	72	0	-53	-89	104

¹ Assumes recent (1967-69 average) price levels prevail through 1975. ² Assumes 1975 grain price levels are 15 percent below recent levels while recent livestock prices are maintained. ³ Crop yields under alternative A are based on a projection of a modified 1960-70 yield trend. Under alternative B, the 1966-70 average yield was used. Carcass weight for beef is a modified 1955-69 trend while for pork the 1967-69 average is used.

⁴ Taken from an OECD study for wheat and from a Canadian study for meat. Projections for coarse grains were made by extension of the 1960-69 trend. ⁵ Projections for wheat, corn, and meat are taken from alternative A. Barley and oats projections are based on alternative A with adjustments for the shortfall in oats production and increased feed requirements due to increased pork production. One bu. of oats = 34 lbs.

mostly in the Prairie Provinces—where land resources are available. The needed land resources will be provided in part by the government's forage incentive program, which has a goal of converting 4 million acres of cropland to forage. The forage program will pay producers C\$10 per acre for land converted from crops to perennial forage.

Nevertheless, the ERS study notes that conversion is expensive and seeded pasture takes several years to reach full production. Returns in the short run appear to be more favorable for continued production of grain and oilseeds.

Pork. Given 1967–69 grain prices, pork production in 1975 will be slightly below domestic needs. If grain prices fall 15 percent, pork output will exceed demand. The excess would be enough to allow a 40-percent increase in net exports above the 1970 level.

The pork supply, which in the past has fluctuated widely from year to year, will tend to be somewhat more stable as production becomes more concentrated in the hands of specialized producers. (6)

Jordan's Agriculture Slow To Recover From War

As in most other less developed countries, agriculture dominates the economy in Jordan.

Its agriculture also shares some traditional problems that plague the underdeveloped world: poor cropping practices, low use of fertilizer, and small farms, most of which are under 25 acres. Facilities for marketing and distributing agricultural commodities are inadequate, and production costs are high.

But unlike most other less developed countries, Jordan's agriculture still bears the unhealed scars of war.

Before the 6-day conflict with Israel in June 1967, Jordan had made remarkable strides in economic development. Gross National Product since 1959 had risen at an annual rate of more than 10 percent.

The loss of the West Bank and

Jerusalem dealt a severe blow to the Jordanian economy in general and to agriculture in particular.

The West Bank held 40 percent of Jordan's arable land—a scarce resource, since four-fifths of the country's land is desert. The West Bank also contributed about 40 percent of the country's agricultural production. Except for fruits and vegetables, the normally lucrative exchange in all other farm commodities produced on the two Banks was disrupted in 1967 and sharply reduced thereafter.

In 1969 and the first half of 1970, the economy made a partial comeback. GNP advanced about 15 percent in current prices and 7 percent in real terms—mainly due to heavy government spending that was partly financed by other Arab nations.

In late 1970, however, economic recovery suffered another setback when hostilities broke out between the Jordanian Government and guerrilla forces within Jordan. The resultant delays in repairing irrigation facilities—damaged by the Israelis in 1968—further contributed to economic slowdown, as did the extremely poor showing of crops harvested in 1970.

Due to excellent and well-distributed winter rains, 1971 crop production showed a substantial increase over that of 1970—nearly fourfold. This greatly reduced import needs for barley in particular.

Jordan produces a variety of crops, but wheat is the most important. Barley, sorghum, and corn are also grown. The biggest vegetable crop is tomatoes. Olives, grapes, and figs are grown in the western areas and bananas, citrus fruit, and dates, in the irrigated areas.

Livestock products—mostly from sheep and goats—make up as much as a third of agriculture's total value in years of good rainfall. Years of drought, however, produce high death losses of animals and liquidation of herds.

Livestock herding is done under semi-nomadic conditions. Because of

the often poor grazing, it's not uncommon to see large herds of animals in poor physical condition. Efforts are being made to improve the livestock industry to enrich the human diet and reduce dependence on imports.

Jordan's main exports are fruits and vegetables. Also important are cigarette exports, averaging \$1.5 million in 1968 and 1969, or more than 9 percent of total agricultural exports.

The U.S. takes virtually no agricultural products from Jordan. Our exports to that country are primarily wheat and wheat flour and some feed grains and dairy products—all under the Public Law 480 program. (7)

EC Growth Threatens U.S. Farm Exports

Tighter world markets are in store for U.S. farm exports with expansion of the European Community.

In 1973, the original members (France, Germany, Luxembourg, Italy, the Netherlands, and Belgium) will probably be joined by the United Kingdom.

Ireland, Denmark, and Norway are expected to follow the U.K. into the EC fold. The four countries, together with the six-member EC, imported \$2.1 billion worth of U.S. agricultural commodities in calendar year 1970. The combined total represented 28 percent of our overseas sales of farm products during that year.

An enlarged EC could put a three-sided squeeze on U.S. farm exports. First, the EC's stiff trade barriers would be extended to four additional trading partners. Second, increased output within the expanded Community means the U.S. would have to compete with more EC products in outside markets. Finally, competition would accelerate with countries whose products are diverted to other markets from the larger, protected EC domestic market.

Also of concern to U.S. exporters is the EC's continuing shift away from the Most-Favored-Nation con-

cept. Under this policy, trade preferences granted to any one country are granted to most others. The shift has been toward special preferential trade agreements with numerous individual countries throughout Europe and Africa.

Such arrangements hamper U.S. trade. For example, the EC has granted special import duties on citrus from Tunisia, Morocco, Spain, and Israel. As a result, these countries have accelerated sales to the Community due to price advantages over U.S. citrus exporters.

Though the U.S. backed British membership in the EC, it is naturally concerned about protecting traditional American interests, particularly those of agriculture.

The U.S. wants to insure that the enlargement arrangements conform to the General Agreement on Tariffs and Trade (GATT).

During negotiations scheduled for this year, GATT contracting parties will examine terms of the expansion. At that time, the U.S. will seek to protect certain GATT rights previously held with the U.K. (10)

A Hemispheric Who's Who In Farm Trade With U.S.

A look at our agricultural trade within the Western Hemisphere for the years 1962-70 shows South America still leads all other regions in supplying imports—\$1.1 billion in 1970—and continues to be second in this Hemisphere as a market for our agricultural exports.

South America's share, though, of total U.S. agricultural trade with the Western Hemisphere dwindled in the 1962-70 period. Most of the slack was picked up by Mexico.

In 1962, 52 percent of U.S. agricultural imports from the Western Hemisphere came from South America, but by the end of 1970 the percentage had dropped to 41. U.S. exports to South America dipped from 30 to 25 percent of our total shipments to Western Hemisphere countries.

Mexico, meanwhile, gained a 5-

percent bigger share of both U.S. imports and exports in this Hemisphere. The U.S. imported 19 percent of its agricultural goods from Mexico in 1970 and exported 13 percent.

Central America also supplied a 5-percent bigger share of U.S. imports, which by 1970 had increased to 15 percent.

Canada, leading export market in the Western Hemisphere for U.S. agricultural goods, accounted for 44 percent of U.S. exports in 1970—worth \$531 million in U.S. dollars. However, Canada's share of U.S. ex-

ports to the Western Hemisphere countries has been falling. Canada accounted for half of U.S. exports in 1962.

In agricultural trade with Canada, the U.S. imports primarily beverages and live animals which have made up about 50 percent of our imports from there since 1962. Live animals accounted for a smaller percentage, decreasing from 22 percent of U.S. imports from Canada in 1962 to 12 percent in 1970. Our main exports to Canada have been fruits and vegetables, consistently making up about 40 percent of our shipments.

Caribbean countries took a larger proportion of U.S. exports in 1970—12 percent against 8 percent in 1962. From Latin America, the U.S. imports principally coffee, sugar, meat, cocoa, and bananas. These products made up 78 percent of U.S. imports from Latin America in 1970, and 72 percent in '62. The biggest gain was in imports of fruits and vegetables, mainly from Mexico.

The U.S.'s main agricultural exports to Latin American countries are cereals and cereal products. Exports of these products declined from 49 percent in 1962 to 38 percent of the total in 1970. (8)

Japanese Feed Importers Court Non-U.S. Suppliers

The Japanese, who get roughly two-thirds of their corn and grain sorghum from the U.S., are looking for alternative sources of feed grains.

The government has announced plans to conduct a 2-year survey of the potential feed export situation in several countries, among them the People's Republic of China. Purpose of the survey is to minimize dependence on a single supplier in the event of dock strikes and outbreaks of plant diseases in the supplying country.

In a related development, Japanese officials are exploring the possibility of long-term contracts with China for importing feedstuffs and livestock products. (11)

Tropical Tenderizer

It's a common practice in the tropics to leave tough chickens or wild game wrapped in papaya leaves overnight before cooking, or even rub the meat with juice of the papaya to render it more tender.

The unripe fruit, as well as other parts of the plant, exudes a milky juice that contains a protein-digesting enzyme known as papain.

The U.S. is by far the largest consumer of papain. The U.S. imports primarily from Ceylon, the Congo, Uganda, Kenya, and Tanzania. Our annual imports of papain have generally trended up. They grew from an estimated 380,000 pounds in 1966, valued at \$850,000, to about 600,000 pounds by 1969 (\$1.4 million).

Here, as in the tropics, the main use of papain is as a meat tenderizer. Most appears in commercial products for use in home cooking. Another application is to inject cattle with papain just before slaughter.

The latter method of meat tenderization, developed by a leading U.S. meat packing firm, is known as the "Proten" process. Cattle are USDA inspected and weighed prior to injection of the fluid, which works through the bloodstream tenderizing the meat.

USDA regulations require that all meat treated with the "Proten" process be so labeled and separated from other cuts at the meat counter.

Papain is also used in making cosmetics, in degumming silk and rayon, and as a medical aid for ulcer and stomach disorders. (9)

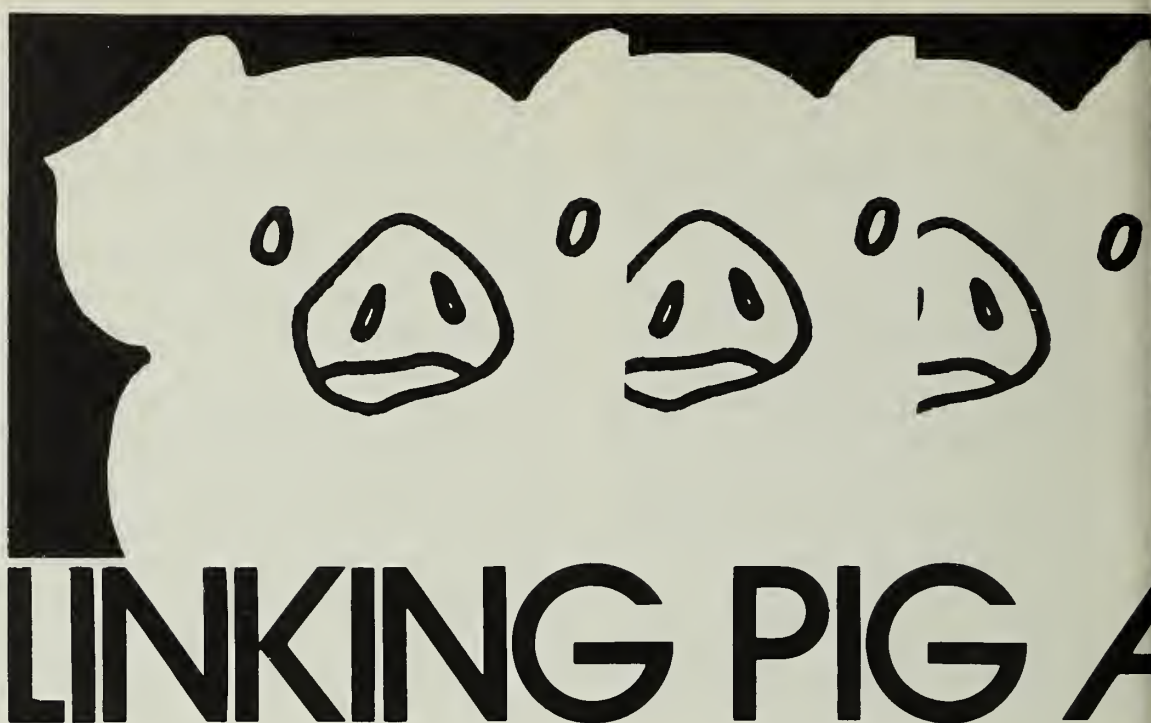
Dear Sir:

I sell my hogs for \$20 per hundred-weight—that's only 20¢ a pound. Why is it, then, that supermarkets are charging as much as \$1.10 a pound for pork chops?

That's typical of the many letters to USDA questioning the marketing margins for meat. The price spread implied in the letter seems excessive. But the margin isn't nearly as wide as it appears when figured on the quantity of pork sold by the farmer compared to what's eventually sold to the consumer.

USDA regularly publishes farm-retail, wholesale-retail and farm-wholesale price spreads for pork based on the weight of pork purchased at the retail level. After converting farm prices to the equivalent weight of pork sold at retail, the farmers' share averages about 45 or 50 percent of the consumers' dollar spent for pork. In the third quarter of 1971, the retail price of all pork cuts averaged 71.3¢ per pound. The net farm value averaged 33.7¢ per pound sold at retail.

These price spread calculations on a retail weight basis are fine for consumers' interpretation since that is the basis on which they buy pork. However, the farmer sells the whole



220-pound hog, dressing out as a 149-pound carcass and yielding 119 pounds of fresh and processed pork bought by retailers. Since farmers sell the whole hog, margins based on dollar-per-hog are more meaningful to them.

In the table that's shown below, values per head are calculated for a live 220-pound hog, its principal wholesale cuts and the corresponding retail products (byproducts and lard are excluded). From these values, three marketing margins are derived: farm-wholesale, covering

meatpacker and processor costs; wholesale-to-retail, covering wholesaling and retailing costs; and total farm-to-retail, covering all marketing costs.

The table shows the gross receipts and gross margins for a 220-pound barrow or gilt during 1966-70 and the first three quarters of 1971. The following example illustrates how the margins were calculated for the 3rd quarter of 1971:

The farmer sells his 220-pound hog to a packer for a net \$40.72 (after deducting \$1.72 transporta-

GROSS RECEIPTS FOR PORK PRODUCED FROM A 220-POUND BARROW OR GILT

					1970				1971		
	1966	1967	1968	1969	Qtr I	Qtr II	Qtr III	Qtr IV	Qtr I	Qtr II	Qtr III
DOLLARS											
Total value of retail cuts (for 118.18 lbs. of cuts less 5.5% shrink equals 111.68 lbs. sold ¹).	81.61	74.48	74.89	82.98	91.35	89.34	88.23	79.63	77.28	76.39	79.63
Total value of wholesale cuts (for 119.50 lbs. sold ²)	63.84	57.04	57.39	65.34	72.26	67.76	64.85	57.48	55.96	55.69	58.99
Total farm value of 220 lb. barrow or gilt (excludes transportation and marketing charges)	50.60	41.36	40.74	50.84	58.39	50.73	47.96	34.39	37.03	36.28	40.72
Less farm value of byproducts	4.08	2.77	2.44	3.57	4.58	3.91	3.69	2.68	3.02	2.90	3.13
Net farm value of 220 lb. barrow or gilt	46.52	38.59	38.30	47.27	53.81	46.82	44.27	44.27	31.71	33.38	37.59
Gross margins for pork sold											
Wholesale-retail	17.77	17.44	17.50	17.64	19.09	21.58	23.38	22.15	21.32	20.70	20.64
Farm-wholesale	17.32	18.45	19.09	18.07	18.45	20.94	20.58	25.77	21.95	22.31	21.40
Farm-retail	35.09	35.89	36.59	35.71	37.54	42.52	43.96	47.92	43.27	43.01	42.04

¹ Since hogs have become leaner in recent years, the amount of pork sold has increased over time. The amount of meat sold was 110.28 pounds in 1966, 110.83 in 1967 and 111.11 pounds in 1968. Retail shrink includes losses in value from spoilage and pilferage. ² The pounds of pork sold at wholesale were 118.00 pounds in 1966, 118.59 in 1967 and 118.89 in 1968.



tion and marketing charges). Of this total, \$3.13 is the farm value of by-products—ears, heart, liver, brains, kidneys, lard, etc.—weighing a total of 29.48 pounds. (Byproducts are not priced at the farm level so their equivalent farm values must be estimated from wholesale prices.)

To arrive at the farm value of the pork produced from the hog, the by-product value is subtracted from the liveweight selling price: \$40.72 less \$3.13 = \$37.59. The resulting net farm value is then used to calculate the marketing margins.

Unlike beef, which is sold as fresh red meat, most pork is sold as processed items. Thus, the packer-processor sells 119.5 pounds of wholesale cuts after the removal of byproducts and waste. The weighted average price for these wholesale cuts was about 49¢ per pound for a total return to the packer of \$58.99. Thus, the farm-wholesale margin is \$21.40 (\$58.99 less \$37.59).

The retailer trims the wholesale cuts into 118.18 pounds of retail cuts, but because of a 5.5 percent shrink—losses in value from spoilage and pilferage—he usually sells only 111.68 pounds.

The retail gross value is \$79.63 for the 111.68 pounds of meat sold at an average of 71.3¢ per pound. The margin from wholesale to retail is

\$20.64, and the farm to retail margin is \$42.04 (\$79.63 less \$37.59).

In addition to usual year-to-year fluctuations, the gross farm-retail margin for pork has widened since 1966. The farm-wholesale and wholesale-retail margins have widened about equally during this period.

In general, gross margins widen when higher operating costs can't be offset by stepped-up efficiency. And they fluctuate between months because of time lags in adjusting prices at various market levels. (12)

Regional Apple Costs Vary From Pick to Pack

Costs of harvesting, storing, and packing fresh apples vary widely among the major producing regions.

In the 1969/70 crop year, harvesting—picking and hauling—costs ranged from 29¢ per bushel in the Northwest to 44¢ in the Northeast.

Lower costs in the Northwest result partially from efficiencies of picking in the area's densely planted orchards of small, uniform-sized trees. Moreover, nearly half the Northwest crop in 1969/70 was picked by local labor, who usually don't require special housing or labor camps. In the Northeast—New York, New Jersey, and New England—local labor picked only 20 percent

of the crop, the rest having been harvested by migrant workers.

The apple industry uses two types of cold storage—regular and controlled atmosphere. In the year under review, regular atmosphere (RA) storage rates averaged 29¢ per bushel in the Lake States, 30¢ in Appalachia, 33¢ in the Northeast, and 35¢ in the Northwest.

Storage costs for controlled atmosphere (CA), which extends storage time into spring and summer, ran 25–35¢ higher in most regions. Both RA and CA charges were highest in the Northwest, which also has the longest storage season.

Packing costs of fresh apples include labor, containers, and overhead expenses. During 1969/70, packing costs—including selling costs—peaked at \$1.85, for tray pack cartons in California north of San Francisco. (Tray packs usually cost more to pack than either bulk cartons or bagged apples in master containers.) Lowest costs—94¢—were found in the Lake States, for loose apples packed in bulk cartons. (13)

Food Chains Move Into Milk Processing

Nobody would be greatly surprised to hear that most supermarkets centrally buy their milk: the big food chains order from big fluid milk processors on a regional basis.

But supermarkets are taking still another step: they're going into milk processing themselves.

In a check of the 12-State North Central Region plus Kentucky, ERS found that in December of 1968, 9 food chains had gone into milk processing with 13 plants (nine of these started during the 1960's). That month the plants packaged about 105 million pounds of fluid milk products—an estimated 14 percent of all fluid milk sold through retail stores in the 13-State area.

Why are food chains going into the milk business?

The firms interviewed cited savings in distribution costs—primarily in the delivery of milk from the

processing plant dock to the supermarket dairy case.

The firms' managers agreed that fluid milk processors could process milk for supermarkets as efficiently as the food chains, but they said chains could deliver the milk more efficiently than the processors.

Food chains that had gone into milk processing tended to feel that processors had not given them sufficient discount for milk sold under the food chain's own labels and had not given them the more limited service they wanted.

Food chains wanted to pay less for milk—in return for fewer services rendered. Some preferred to pick up the milk at the processors' plant and deliver it themselves. Processors, on the other hand, wanted to provide full service, delivering the milk and servicing the supermarket shelf. (14)

Northwest Capitalizes On Longer Potato Menu

One of every three potatoes produced and marketed in the U.S. comes from the far Northwest—Washington, Oregon, and Idaho. Since 1968, the farm value of the area's potato crop has topped \$200 million annually.

Several developments have spurred the market expansion for Northwest potatoes. To some extent, the Northwest crop has displaced potatoes grown in other States. More importantly, the Northwest has capitalized on gains in potato consumption—up nearly 10 pounds per person over the 1960's, despite a slump in use of fresh potatoes.

Consumption of processed potatoes has more than offset the slack in fresh potato use. Thus, increased potato processing is largely behind the bigger marketings of Northwest potatoes.

In Washington alone, processing has risen at an average rate of 2.7 million cwt. a year since 1964. The shift of processing plants to production areas, in addition to paring marketing costs, has generated more business activity within the produc-

ing regions of the Northwest.

Storage operations also have emerged as a major feature in the potato marketing system. A sizable share of the Northwest's crop—which is harvested in August–October—is placed in storage to meet the year 'round demands of consumers, as well as to supply processors.

The main hurdle to marketing Northwest potato products is the high shipping costs to large consumer centers in the Northeast and North Central regions.

To make their products more competitive, Northwest growers and processors try to differentiate their potatoes from others on the market. Efforts in this direction include producing varieties preferred by consumers, and grading, sizing, and packaging to heighten consumer acceptance.

In addition, industry advertising and promotion programs have, in some cases, expanded distribution and brought higher returns to growers. Despite high transportation costs, significant quantities of Northwest potatoes are received in all major market outlets. (15)

Finding Tallow Buyers Tall Order for Renderers

The U.S. rendering industry—supplier of inedible tallow and other animal fat byproducts—has had spectacular growth over the past 20 years.

During 1971/72, the rendering industry may produce an estimated 5.4 billion pounds of tallow—more than double the production in the early 1950's.

Growth of the livestock industry, which supplies the raw materials for rendering, largely accounts for gains in tallow production. Between 1950–70, cattle slaughter rose 115 percent and beef output, 150 percent.

Cattle slaughter and beef output are expected to expand one-third by 1980. Based on these prospects, the rendering industry should then be producing around 7 billion pounds

of inedible tallow—about 2 billion pounds over current levels.

Finding markets for this outturn will be the major challenge facing the industry throughout this decade.

Marketing tallow became difficult when accelerated production—up 4 percent annually—was accompanied by losses in the traditional soap market. Though tallow production has gone up twice as fast as domestic use, high-level exports have prevented the accumulation of large stocks.

The soap market, formerly the major nonfood outlet for fats and oils, began to slip with the advent of synthetic detergents. Use of tallow by the soap industry was halved in the 1950–70 period.

Concern that phosphates in synthetic detergents cause water pollution may augur well for tallow. To replace phosphate detergents, USDA scientists have proposed a modified fat-based soap that's claimed to be equally as effective in hard water.

Besides soapmaking, tallow is used in livestock rations, lubricants, paints and varnishes, printing ink, and a host of other industrial applications.

Animal feeds, however, now supply the biggest domestic outlet. Tallow was first mixed in feeds in the early 1950's, and its use has grown an average rate of 22 percent a year. More recently the growth rate has slowed to about 4 percent. In 1970/71, over two-fifths of domestic consumption of tallow were going to animal feeds.

Tallow's use in prepared animal feeds will continue to mount, but at a slower pace than in the recent past. This prospect reflects the up-trend in livestock output, rising production of prepared feeds, and more widespread application of fats in feeds.

Another tallow market with excellent growth potential is fatty acids. End uses of fatty acids—including protective coating, textile processing, lubricants, cosmetics, and plastics—are continually being discovered.

Last decade, tallow made up nearly

30 percent of the raw materials for fatty acids. This level will probably be maintained if tallow prices remain competitive.

Exports provide the main stopgap for U.S. tallow surpluses above domestic requirements. Exports have increased about 10 percent each year—compared with only 2 percent for domestic uses. In recent years, about half of total tallow production has been exported.

Strong foreign demand reflects tallow's low price: it's the least costly fat or oil on the world market. Leading importers are Japan, the Netherlands, and India. Market expansion is also seen promising in the developing countries. (16)

Soybean Prices Analyzed In Econometric Model

ERS has modified a new statistical model developed at the University of Minnesota to estimate soybean prices and total use for the market years 1971/72 and 1972/73.

The model's main purpose is to assist the forecaster in gaining a more systematic understanding of complex related events. The model estimates are based on specified assumptions of supply and demand factors, such as projected consumer income and levels of exports. By varying the assumptions for the variables affecting the soybean economy, different demand estimates are obtained.

The assumptions used to determine the base estimate ask—What happens if PL-480 soybean oil shipments hold steady at recent levels, U.S. livestock output increases 2¾ percent, foreign livestock output goes up 1½ percent, and real U.S. food expenditures increase 5 percent?

These model assumptions result in a soybean price estimate of about \$3 per bushel for the 1971/72 marketing year. The economists demonstrate how price and usage estimates will vary as assumptions are altered. Changes in assumptions are often justified as the marketing year progresses.

For example, if an effective devaluation of 5 percent of the dollar would occur in major importing countries, the U.S. soybean price might be expected to increase about 12¢ per bushel above the base estimate of \$3 per bushel in 1971/72.

The model also shows how changes in crop prices may affect soybean acres harvested in the following crop year. To illustrate, a 10¢-change in the price of soybeans may be expected to result in a change in the opposite direction of 680,000 acres of soybeans the following year.

The economists who generated the model estimates emphasize that these are the result of statistical analyses based on specified assumptions. These estimates do not necessarily agree with the official estimates of the Department of Agriculture, nor do they imply the status of "official estimates". (17)

Cotton Industry Seeks Lower Marketing Costs

A wider wedge for cotton in the fibers market? Part of the answer resides between the farm gate and the textile mill or U.S. port.

In the 1969/70 season the marketing costs of getting raw cotton to domestic users ranged from a low of \$31.69 per bale in the Southeast to a high of \$49.02 in the West. These

are among the findings of an ERS study in the Cotton Belt of off-farm costs and charges of moving cotton by specific marketing function in four geographic regions (see table below).

The cotton industry is looking into the possibilities for cutting these marketing costs. Increased efficiency would be a boon to cotton in competing with manmade fibers, as well as in export markets where the high off-farm costs help put U.S. cotton at a disadvantage.

The estimates developed by ERS provide insights into areas of potential cost reductions through mechanization, changes in industrial structure, and additional research.

On the mechanization side, automated unloading of seed cotton and of bale packaging could shave 3 to 7 percent from the total ginning cost, depending on gin size. In the Mid-south, the per-bale saving is estimated as high as \$1.19 on a gin with an hourly capacity of 8 bales. Gins with capacities of 20–36 bales could achieve cost reductions ranging from 36¢ to 67¢ per bale.

Even greater are the potential savings through consolidation of smaller gins into larger plants, and by combining ginning and warehouse functions. Central ginning, for example, could lower costs as much as \$5 per bale. (18)

COSTS AND CHARGES TO MOVE COTTON FROM FARMS TO U.S. USERS OR PORTS, 1969/70 SEASON

Marketing service	Southeast ¹		Midsouth ²		Southwest ³		West ⁴	
	Cost	Charge	Cost	Charge	Cost	Charge	Cost	Charge
	<i>Dollars per bale ⁵</i>							
Ginning	18.05	15.10	18.05	18.02	26.89	20.02	26.89	21.96
Receiving at compress or warehouse	1.02	1.01	.91	1.06	.94	1.02	.63	.72
Storage	2.02	2.39	2.56	3.94	1.60	2.38	1.80	3.51
Compression	—	—	1.94	2.05	1.76	2.30	1.99	2.32
Break-out and shipping	1.79	1.79	1.36	1.60	1.05	1.13	1.22	1.40
Transportation	2.22	2.22	5.06	5.06	4.32	4.32	7.19	7.19
Financing	2.88	2.88	4.50	4.50	2.60	2.60	4.86	4.86
All other	3.71	3.71	4.61	4.61	4.84	4.84	4.44	4.44
Total	31.69	29.10	38.99	40.84	44.00	38.61	49.02	46.40

¹ Alabama, Georgia, Florida, and the Carolinas. ² Arkansas, Louisiana, Mississippi, Missouri, and Tennessee. ³ Oklahoma and Texas. ⁴ Arizona, California, and New Mexico. ⁵ ERS estimates. Where the costs to perform the services are higher than the actual charges, it may be that some other part of the owner's overall enterprise is bearing part of the ginning cost; or, the owner is covering variable costs and perhaps a part of the fixed costs and chooses to operate on this basis rather than shut down.

TENNESSEE HOME TOUR



Visits with nearly 900 rural households in one part of Tennessee turned up some differences in the type of housing occupied by black and white families.

By the appearance of the homes lining the major highways, South Central Tennessee would seem quite prosperous as rural areas go.

Yet on the average, an estimated 33 percent of the homes in the area lack complete plumbing—twice the proportion for rural America as a whole. Low family incomes may be to blame.

In the late 1960's, over 40 percent of the whites in South Central Ten-

nessee and about 60 percent of the blacks had incomes under \$3,000, even though most of the able-bodied household heads were employed.

In some instances, public water systems are not available to these rural homes. But even where the systems exist, they have not led to the addition of complete plumbing in all residences.

As part of a series of studies on rural America's housing dilemma, ERS talked with owners and renters of nearly 900 rural dwellings in 10 counties of South Central Tennessee, with a total population of 141,000 in 1970. The northernmost county begins about 30 miles south of Nash-

ville, and the southernmost counties extend along the northern border of Alabama for about 100 miles.

This region was selected for study because unlike many other parts of the South, it has relatively few "no-cash renters"—people living in houses left over from the days of plantations and sharecropping. Previous research had shown that where the no-cash-rent system prevails, families generally don't make home improvements. Would the reverse hold true in central Tennessee?

Moreover, around 9 percent of the residents in the Tennessee study area are blacks, only slightly below the national average of 11 percent.

Heretofore, little had been known about the status of black rural housing where this race ratio predominates. The ERS survey team specifically wanted to find out the differences, if any, between the dwellings of the blacks and whites.

Dwellings occupied by black families were found to be just as large as those of the whites (generally four to seven rooms), had about the same number of persons per dwelling (four), were built about the same time (prior to 1950), had similar outside walls (siding over shiplap) and used a comparable water source (drilled wells).

The most significant differences entered when measuring the home's value and the adequacy of plumbing. About twice as many black families lived in a home lacking complete plumbing—defined for census purposes as having hot and cold running water, a flush toilet, and bathtub or shower.

Blacks also reported a lower median value of their homes than the whites. For owned nonfarm dwellings, the 1968 values for blacks were roughly \$5,500 versus \$6,500 for whites.

In many cases, this difference was equivalent to the cost of adding complete plumbing facilities.

Plumbing aside, the homes surveyed got fairly high marks on housing quality in general.

Approximately 30 percent of the households in the sample had made repairs or improvements in 1968 alone. That year repairs on older homes outnumbered new home construction by 15 to 1.

Remodeling the kitchen ranked as the most frequent major improvement, followed by repair of roofs and the addition of bedrooms. The black families added a bedroom more often than the whites, who gave first priority to refurbishing the kitchen.

Only 1 percent of residents making repairs in 1968 reported putting in a new furnace. Half the homes used coal or wood stoves for heat.

Over half the respondents said more improvements were needed.

This opinion, though, was expressed by a larger proportion of black home-owners (73 percent) than whites (51 percent).

The ERS report points out that most "substandard" units in rural America are so rated because of the lack of complete plumbing. In South Central Tennessee, the addition of complete plumbing accounted for only around 10 percent of all home improvements in the survey year 1968. Applied on a national scale, this could mean there's been more upgrading of rural housing quality than what has been suggested by changes in just the plumbing system.

Nevertheless, lack of adequate plumbing remains the overriding deficiency in rural homes. The ERS study concludes the poorest families may not be able to get the needed facilities without financial help, such as easier credit terms for making housing improvements. (19)

Wisconsin "Togetherness" Spawns Recreation Areas

Residents of rural Wisconsin are proving that community action gets results. Through group efforts, local citizens are creating and expanding needed recreational facilities in their communities.

Major vehicles for community action in Wisconsin are the local watershed associations. The associations, organized in each watershed project throughout the State, are primarily responsible for providing flood control in their regions.

In many instances, members of local watershed associations have not only developed flood control systems, but have decided to use the resulting lake impoundments for recreation purposes.

By early 1970, 15 new lakes with adjacent parks were under construction in 13 Wisconsin watershed areas. The lakes average 154 acres; the surrounding parks, close to 900 acres. Facilities include picnic tables and grills, camp sites, parking areas and access roads, beaches and bath houses.

Most of the new multi-purpose recreation developments are in locations where natural lakes are scarce. Thus, through community action, local residents are free from danger and losses from flooding, and can enjoy recreational facilities formerly nonexistent in their areas.

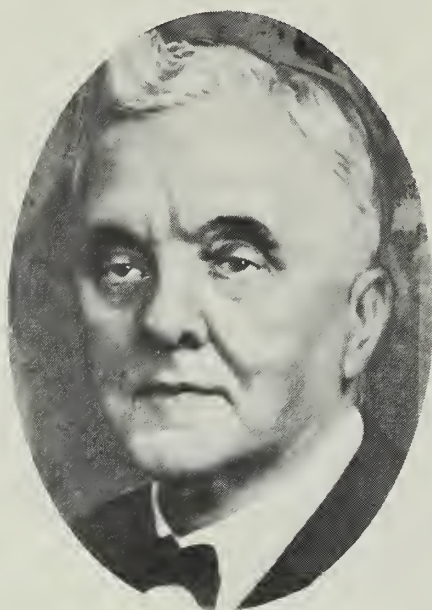
Another vehicle for community action is the nonprofit corporation, organized under Wisconsin statutes. Nineteen of 25 recent recreation loans secured from FHA by nonprofit corporations or municipalities went to create or improve existing golf courses and facilities. Other developments included a boat harbor, skiing enterprise, hunting preserve, skating rink, campground and a park.

The recreation loans averaged \$128,000, but ranged from \$30,000 to nearly \$300,000. Most of the borrowing corporations had existed for 2½–3 years. But one corporation secured a loan to renovate facilities on its 45-year-old golf course. Similarly, a ski development loan was granted to a nonprofit organization formed in 1955. Funds were used to install a T-bar lift, purchase snow-making equipment, and enlarge the entire facility.

Cooperatives are a third type of community action group that are well established in Wisconsin. Though often used for agricultural purposes, cooperatives have thus far taken little action in furthering recreational development.

Indications are, however, that outdoor recreation facilities offer new potentials for farmer cooperatives in Wisconsin and elsewhere. Moreover, farmers stand to realize added income through recreation cooperatives.

The cooperative approach adapts readily to recreation development. By pooling their resources, farmers can create an extensive recreation site, such as a hunting preserve or campground. In addition, the farmers can furnish a wider array of facilities, activities, and services on the site than if the project were an individual venture. (21)



Men and Milestones

WASHINGTON, MAY 18, 1933
—President Roosevelt signs the Tennessee Valley Authority Act creating a public corporation authorized to construct dams and power plants and to develop the economic and social well-being of residents of the Tennessee Valley region.

Passage of the TVA Act was a personal triumph for George William Norris, the Nebraska Senator who spearheaded the fight for publicly-owned hydroelectric plants.

Norris was born near Clyde, Ohio, on July 11, 1861. He attended Baldwin University and North Indiana Normal School, and moved to Nebraska in 1885. He was elected to the House of Representatives in 1902 and entered the Senate in 1912.

As a member of the Senate Committee on Agriculture and Forestry and later of the Public Lands Committee, Norris fought to better conditions on America's farms. During the twenties and thirties, when the plight of the Nation's farmers was particularly desperate, he was a strong propo-

nent of price supports, cooperative marketing, and other measures designed to improve farm income.

Beyond purely economic programs, however, Norris dreamed of public power companies providing light to rural America and easing the burden of farm labor.

In the 1920's he dominated the struggle to retain Federal ownership of dams built during World War I. In the thirties, besides guiding the TVA legislation through Congress, he recognized that the Rural Electrification Administration was an essential component of his dream and worked to establish the REA on a permanent basis with nationwide jurisdiction.

Norris died on September 2, 1944.

Rural conditions have improved greatly since the early 1930's when only about 1 farm in 10 had electricity. Today over 98 percent of the Nation's farms are electrified. The change was due largely to the courage and determination of George W. Norris, Senator from Nebraska. (22)

Owners Quizzed on Use Of New Hampshire's Forests

Northern New Hampshire is almost entirely forests—2.6 million acres out of 2.8 million.

Who owns this land? What is it being used for?

ERS and the New Hampshire Agricultural Experiment Station interviewed 219 resident owners of nonindustrial woodland in 1968, limiting the study to owners of from 100 to 5,000 acres.

They found the owners to be predominantly male, predominantly 50 years of age or older. The "average" owner had 329 acres of woodland.

The 159 households reporting income averaged \$9,731 annually from all sources. About one-fourth of the households had incomes below \$5,000.

Forty-four percent of the owners said the most important use they made of their woodland was in production of timber and other forest products: pulpwood, sawlogs, Christmas trees and greens, maple sirup.

Thirty-five percent listed recreation and residence as the main uses they made of their woodland; more specifically, for personal recreation, wildlife development, and nature study and conservation.

While nearly 60 percent of the owners had sold forest products during the 5 years preceding the study, only about one in three owners had sold forest products in 1967.

Of the nearly two in three who did not, the explanation given by more than 40 percent was that they did not have a sufficient volume of products to market. Most of the others said they were not interested in selling forest products or were holding the woods for future retirement income.

Only 54 of the 219 woodland owners said they wanted to begin or to expand woods operations.

The economy of the study area is based primarily on forest products, agriculture, and outdoor recreation, with dairying the major agricultural enterprise. (20)

Going to one of the first food chains to introduce extensively readable dates on groceries, ERS asks shoppers what interpretation they give to those "open dates."

Does today's shopper pay attention to open dating of grocery items?

An ERS study of one chain store open dating program indicates that while many shoppers look at the dates on items they buy, they frequently misinterpret the meaning.

However, most shoppers surveyed indicated concern about buying fresh foods, and seem to feel that open dating assures them that products are fresh.

The large Midwestern retail food chain that cooperated in the study was one of the first to introduce and publicize a fairly extensive program of readable dates on private label products.

Seventeen hundred shoppers at 18 stores were interviewed. About half said they were aware of the store's "freshness code (open dating) program."

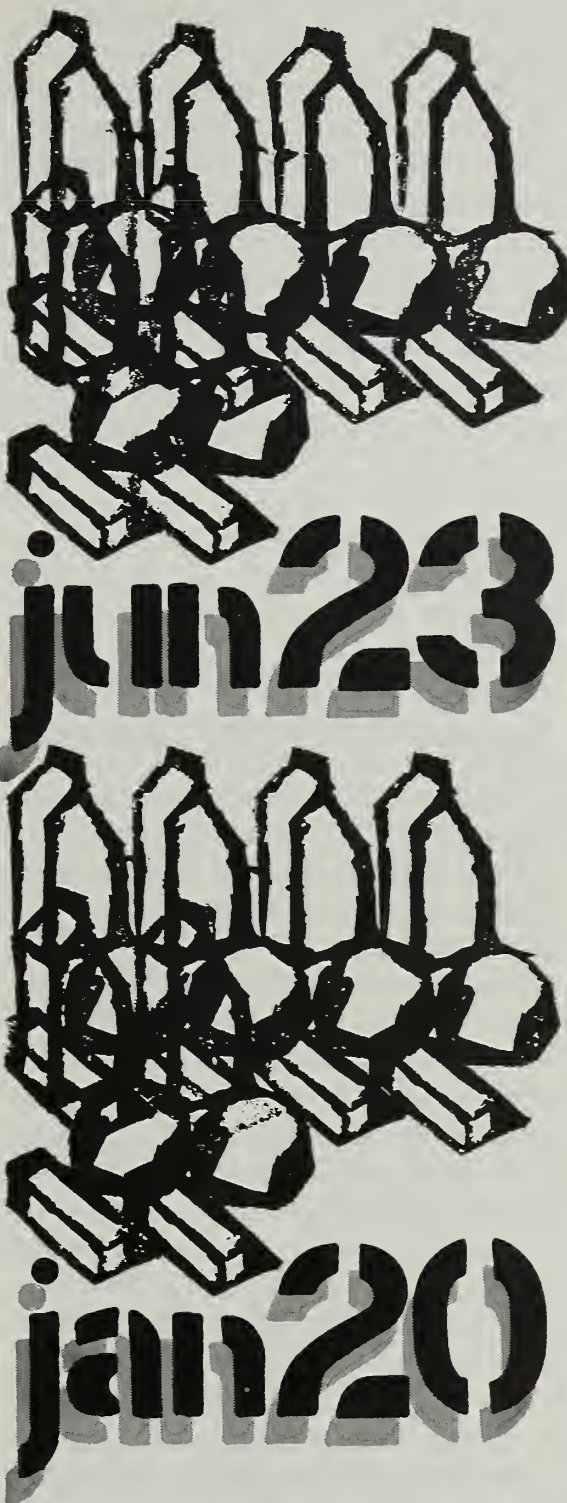
That program, in effect for several months when the survey was taken in the spring of 1971, puts the "pull date"—the date an unsold item will be withdrawn from the display case—on 150 private label products.

The date is clearly readable—such as *Jan. 20*—and is on a wide variety of foods, including fresh meats, poultry, dairy and bakery products, and less perishable items such as cake mixes and coffee.

When the freshness code program began, the company publicized it in newspaper ads and featured displays in the stores to explain the meaning of the dates. In-store materials and newspaper ads emphasized that a shopper could buy the item on the pull date, and still have a reasonable time in which to store and use it while it is of high quality. Shoppers were also advised that the stores' service desks offered a code book to interpret codes for most other products sold in the store.

Some 430 shoppers acquainted

FOOD CODES: the shopper's slant



with the store's freshness code program agreed to in-depth interviews to test their knowledge of the program.

The survey found:

→ Only 20 percent of those interviewed identified the date on the items (the "pull date") as the last date a product is to be sold.

→ Forty-five percent said the numbers on the product referred to a date in the past—such as the day the item was put on display.

→ Another 20 percent thought the date was the last day that the product could be used in the home.

Of the shoppers who said they were familiar with the program, 270 had used the date information at least once. Of these, three in four said they used the freshness code each time they shopped.

The foods they checked most often were few: bread, milk, other dairy products (such as sour cream and cottage cheese), refrigerated dough, and eggs.

While these products accounted for 70 percent of the date checking, few shoppers knew exactly what the date meant. There was one exception: refrigerated dough. This product has been open dated by most manufacturers for several years. In most instances, the package states the item should be used before the date shown. Two out of every three shoppers who checked it regularly knew the date's meaning.

The less perishable items, though open dated by the store, were seldom checked. Only one shopper said she looked at the open date on cookies; three looked at it for coffee; four for cake mixes, gelatin, or other dry mixes.

The prime benefit of dating—as cited by half the shoppers—is to insure product freshness.

When asked what improvements could be made, shoppers most frequently suggested that the need for code books be eliminated—an indication of a preference for open, readable dating. Twelve percent made this suggestion. Forty percent were satisfied with the open dating program and had no improvements to suggest.

The managers of the 18 stores were also interviewed, and generally reacted favorably to the store's program. Many felt it was as helpful to them as to customers.

Half the managers found no disadvantage with open dating. When the code program began, some were concerned that customers might sort out only the freshest products. But most said that this problem had not occurred. (23)

New Whiskeys Go Light on the Rye

The advent of "light" whiskeys has set back the industrial use of rye more than a quarter since 1967/68.

From 1968 to 1971, industry's share of increasing rye utilization dropped from about a quarter to a tenth.

Meanwhile, rye's use as a feed grain has risen sharply because of lower prices caused by large supplies and a change in the pricing structure to more nearly reflect rye's feeding value compared to other grains. In 1970/71, nearly half the rye sold domestically was for feed. Other uses are for food (19 percent) and seed (24 percent).

The 1971/72 rye supply—which includes beginning stocks—is estimated at 80 million bushels, third largest on record.

The 1971 crop, at 51 million bushels, was the largest since 1942 and was due primarily to increased yields. (24)

Foreign Leather Horns In On American Shoe Market

The all-American shoe is getting stepped on by foreign competition.

Note these statistics: There were only 559 million pairs of U.S. shoes made in 1970, down from 642 million in 1968. And in the first 8 months of 1971, shoe output dropped nearly 5 percent from the same period a year earlier.

Increasing imports of leather and other nonrubber shoes are mainly held responsible. They made up about 30 percent of the total U.S. shoe market in 1970, mostly from Italy and Japan.

American shoemakers hope the situation will brighten with the recent changes in monetary exchange rates such as the dollar's devaluation. This may offset some economic advantages of shoe exporters.

The hides picture is further marred by competition from man-made substitutes for genuine

leather. These days only 16 percent of domestically-produced shoes have leather soles, thanks to new materials that claim to outwear leather materials.

Manmades' penetration into the market for shoe uppers has gained only modest success. Some of the vinyl materials give the real thing a run for the money in the market for low-priced shoes, but generally consumers prefer the more comfortable leather products. In 1970, two-thirds of domestic shoes had all-leather uppers, 1 percent more than in 1968.

Of imported footwear, shoes with vinyl uppers saw their market share slip from 46 percent in 1969 (90 million pairs) to 43 percent in 1970 (103 million). (27)

Favorite Foods of Decade Served Up in ERS Review

Tops on the Nation's menu are beef, potatoes, salad, and apples.

These foods came out ahead in an ERS review of eating patterns in the past decade.

Beef is by far the Nation's most popular meat. Americans in 1970 ate an average of 84 pounds of beef per person (retail cut equivalent), 20 pounds more than in 1960. Poultry also made a big gain, from 28 to 41 pounds per person.

Potatoes were in the winning corner as the most popular vegetable, weighing in at 115.5 pounds per person, up from 104 pounds in 1960.

Tomatoes were next with fresh and processed at 30 pounds in 1970 (fresh equivalent weight), followed by lettuce (21 pounds), fresh and processed corn (15), green beans (9), and fresh cabbage (8).

The most popular fresh fruit was the apple, with nearly 19 pounds per person, followed closely by bananas (18 pounds) and oranges (16).

Total food consumption averaged 1,448 pounds per person, up 8 pounds from 1960.

In addition to eating more beef and poultry, Americans have been eating greater amounts of vegetable oils, such as margarine, and more

processed fruits and vegetables.

But they ate fewer eggs, dairy products, fresh fruits and vegetables, and less coffee in 1970 than in 1960. Dairy products especially took a dive. Americans consumed 564 pounds of dairy products (milk equivalent) in 1970—89 pounds less than in 1960. (25)

Capsule Report: Less Thiamin in '72 Diets

The average American diet in 1972 will contain roughly the same portions of minerals, vitamins, and other nutrients as in 1971.

Thiamin may prove the exception. Last year, thiamin levels increased as per capita consumption of pork—an important thiamin source—gained substantially for the first time since the mid-1940's. Pork use will probably slacken this year. As a result, the average thiamin content in the national diet is expected to drift below last year's level.

Consumption patterns of dairy products have been changing, although this is not expected to alter the level of calcium in U.S. diets. A drop in the calcium level resulting from a decline in fluid whole milk and evaporated milk consumption will likely be offset by higher cheese consumption.

Last year, dietary levels of several nutrients inched upward. Per capita amounts of protein, ascorbic acid, phosphorus, iron, niacin, vitamins B6 and B12, fat, and food energy (calories) posted 1-percent gains over 1970. The bigger share of ascorbic acid resulted from stepped-up consumption of citrus fruit juices and white potatoes. Higher consumption of meat and poultry accounted for most of the gains made by the other nutrients.

Compared with 1967 nutritional levels, last year's per capita amounts of all nutrients—except calcium and magnesium—were larger. Fat was the biggest gainer with a 6-percent increase—the result of larger use of salad and cooking oils, beef and pork. (26)

Recent Publications

1971 HANDBOOK OF AGRICULTURAL CHARTS. Office of Information, USDA. AH 423.

This reference book of 166 charts—most with supporting tables—depicts what's happening in the general economy, the farm commodity scene, foreign agricultural trade, marketing, farm population, and family levels of living. New section added this year focuses on land use and on metro-nonmetro comparisons.

ECONOMIES OF SIZE IN FARMING: THEORY, ANALYTICAL PROCEDURES, AND A REVIEW OF SELECTED STUDIES. J. Patrick Madden, Farm Production Economics Division. AER 107.

This report is concerned with the relationship between farm sizes and efficiency of production and how large a farm must be to achieve the most efficient operation.

SOURCES OF CHANGE IN MEXICAN AGRICULTURAL PRODUCTION, 1940-65. Reed Hertford, Foreign Development and Trade Division. FAER 73.

Mexico's production has increased at rates exceeding those achieved by all Latin American nations except Venezuela. The government has made exceptional commitments to increasing production levels and to improving the distribution of agricultural resources. Major public policies have involved large-scale irrigation projects and land reform.

THE AGRICULTURAL ECONOMY AND TRADE OF ROMANIA. H. Christine Collins, Foreign Regional Analysis Division. ERS-For. 320.

Problems and accomplishments of the Romanian agricultural economy since 1955 are discussed, as well as aspects of agricultural policy that have particularly influenced development. Goals of Romania's 5-year plans are compared with actual results.

AGRICULTURE IN THE ENVIRONMENT. David E. Brewster, Economic and Statistical Analysis Division;

The publications listed here are issued by the Economic Research Service and cooperatively by the State universities and colleges. Unless otherwise noted, reports listed here and under Sources are published by ERS. Single copies are available free from The Farm Index, OMS, U.S. Department of Agriculture, Washington, D.C. 20250. State publications (descriptions below include name of experiment station or university after title) may be obtained only by writing to the issuing agencies of the respective States.

and Roger W. Strohbehn, Robert C. Otte, Joseph P. Biniek, and Melvin L. Cotner, Natural Resources Economics Division. ERS 481.

A series of articles that appeared in the March-June 1971 Farm Index magazine are consolidated into one publication. Subtitles include—Environment: The Agricultural Perspective; Using The Land; Environment: Who Pays For What; and The Legislative Record.

LEASING ON CALIFORNIA RICE FARMS. W. R. Grant, R. E. Amarel, and S. S. Johnson, Farm Production Economics Division, in cooperation

with University of California Agricultural Experiment Station. AE 71-2.*

The objectives of this study are to determine the extent and characteristics of leasing California rice farms and the profitability of various types of leasing arrangements with several yield and price combinations.

VARIATIONS IN LENGTH OF THE FARM WORKWEEK. Walter E. Sellers, Jr. Farm Production Economics Division. Stat. Bull. 474.

Not only did the average farm operator in this study have less leisure time than nonfarm workers, but on many farms he also worked more hours a week than his regular hired help. Among the unpaid family workers the wife averaged the shortest workweek on most farms, but she may work many more weeks than other family members. The study also describes variations in workweek length by size and type of farm and by production regions.

MIDWESTERN CORN FARMS: ECONOMIC STATUS AND THE POTENTIAL FOR LARGE AND FAMILY-SIZED UNITS. Kenneth R. Krause, Farm Production Economics Division, and Leonard R. Kyle, Michigan State University. AER 216.

The current situation of large Midwestern corn farms is analyzed in part I of this report. Part II focuses on incentives for these farms. Part III highlights economic characteristics of 10 large corn farms selected for intensive analysis. Part IV discusses the staying power of family-sized corn farms in the Midwest; and part V looks into the future for family-sized and large Midwestern corn farms.

THE FORMULA FEED INDUSTRY IN 1969: A PRELIMINARY REPORT. Earl F. Hodges, George C. Allen, and Gary A. Davis, Farm Production Economics Division. ERS 494.

This report provides information on the number of establishments milling feeds; the quantity of for-

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mula feeds manufactured; distribution and size of milling establishments; type of ownership of manufacturing establishments; and formula feed disposition methods.

THE STRUCTURE OF THE U.S. SWEETENER INDUSTRY. Roy A. Ballinger, Marketing Economics Division. AER 213.

The sweetener industry is divided into several segments, based on geography, the plant (beet, cane, or corn) from which the sweetener is obtained, and the functions performed by different producers. Producers of corn sirup and dextrose have benefited to some extent from the protection received by the sugar industry, since these products compete with sugar. Saccharin, the prin-

cipal noncaloric sweetener, competes to some extent with sugar.

FOOD CONSUMPTION, PRICES, EXPENDITURES: SUPPLEMENT FOR 1970. Economic and Statistical Analysis Division. Supplement to AER 138.

This supplement revises and updates through 1970 the statistical information contained in *Food Consumption, Prices, and Expenditures*, issued July 1969. Data are reported as of August 1971.

A PROFILE OF DISABLED HOUSEHOLD HEADS AND SPOUSES IN RURAL AREAS OF THE OZARKS REGION. O. Wendell Holmes, Economic Development Division. AER 217.

In a 1966 study of the socio-economic condition of rural people in the Ozarks region, over 30 percent of the random sample of 1,413 household heads reported some degree of disability. This report describes these households.

A PROPOSED MARKET DEVELOPMENT PROGRAM FOR THE MOHAIR INDUSTRY. Norman L. Rollag, Marketing Economics Division.

Severe competition in both the domestic and foreign markets is evident within the mohair industry with the increased use of synthetics. This study suggests a two-part promotional program should be developed to encourage textile firms, designers, and retailers to use more mohair.

Article Sources

State publications indicated by (*) may be obtained only from the experiment station or university cited. Manuscripts and special material are usually available only on request to authors.

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Economic Trends

Item	Unit or Base Period	1967	1970			1971	
			Year	Oct.	Aug.	Sept.	Oct.
Prices:							
Prices received by farmers	1967=100	—	110	108	113	111	113
Crops	1967=100	—	100	102	108	104	106
Livestock and products	1967=100	—	118	113	117	117	118
Prices paid, interest, taxes and wage rates	1967=100	—	114	115	120	121	121
Family living items	1967=100	—	114	115	120	120	120
Production items	1967=100	—	110	111	116	116	116
Ratio ¹	1967=100	—	96	94	94	92	93
Wholesale prices, all commodities	1967=100	—	110.4	111.0	114.9	114.5	114.4
Industrial commodities	1967=100	—	110.4	111.3	115.1	115.0	115.0
Farm products	1967=100	—	111.0	107.8	113.2	110.5	111.3
Processed foods and feeds	1967=100	—	112.0	111.8	115.4	114.6	114.1
Consumer price index, all items	1967=100	—	116.3	118.1	122.2	122.4	122.6
Food	1967=100	—	114.9	115.5	120.0	119.1	118.9
Farm Food Market Basket: ²							
Retail cost	Dollars	1,080	1,225	1,219	1,264	1,251	1,244
Farm value	Dollars	414	480	462	486	471	478
Farm-retail spread	Dollars	666	745	757	778	780	766
Farmers' share of retail cost	Percent	38	39	38	38	38	38
Farm Income: ³							
Volume of farm marketings	1967	100	104	148	108	120	153
Cash receipts from farm marketings	Million dollars	42,693	49,231	5,750	4,242	4,765	6,100
Crops	Million dollars	18,434	19,636	2,965	1,722	2,129	3,300
Livestock and products	Million dollars	24,259	29,595	2,785	2,520	2,636	2,800
Realized gross income ⁴	Billion dollars	49.0	56.6	—	—	59.3	—
Farm production expenses ⁴	Billion dollars	34.8	40.9	—	—	43.0	—
Realized net income ⁴	Billion dollars	14.2	15.7	—	—	16.3	—
Agricultural Trade:							
Agricultural exports	Million dollars	—	7,174	730	546	750	466
Agricultural imports	Million dollars	—	5,667	480	555	651	302
Land Values:							
Average value per acre	1967 = 100	—	⁶ 118	⁷ 117	—	—	⁸ 121
Total value of farm real estate	Billion dollars	—	⁶ 210.7	⁷ 208.9	—	—	⁸ 214.0
Gross National Product: ⁴							
Consumption	Billion dollars	793.9	974.1	—	—	1,060.8	—
Investment	Billion dollars	492.1	615.8	—	—	672.5	—
Government expenditures	Billion dollars	116.6	135.3	—	—	153.6	—
Net exports	Billion dollars	180.1	219.4	—	—	230.2	—
	Billion dollars	5.2	3.6	—	—	0.5	—
Income and Spending: ⁵							
Personal income, annual rate	Billion dollars	629.3	803.6	813.6	867.6	871.5	872.3
Total retail sales, monthly rate	Million dollars	26,151	31,294	31,621	34,655	35,155	—
Retail sales of food group, monthly rate	Million dollars	5,759	7,176	7,228	7,478	7,505	—
Employment and Wages: ⁵							
Total civilian employment	Millions	74.4	78.6	78.7	79.2	79.5	79.8
Agricultural	Millions	3.8	3.5	3.3	3.4	3.4	3.4
Rate of unemployment	Percent	3.8	4.9	5.5	6.1	6.0	5.8
Workweek in manufacturing	Hours	40.6	39.8	39.6	39.8	39.9	39.9
Hourly earnings in manufacturing, unadjusted	Dollars	2.83	3.36	3.37	3.56	3.60	3.59
Industrial Production: ⁵	1967 = 100	—	107	104	105	106	106
Manufacturers' Shipments and Inventories: ⁵							
Total shipments, monthly rate	Million dollars	46,458	54,429	53,235	57,804	57,464	—
Total inventories, book value end of month	Million dollars	84,563	100,476	100,282	100,063	110,211	—
Total new orders, monthly rate	Million dollars	46,707	53,866	51,951	58,085	56,928	—

¹ Ratio of index of prices received by farmers to index of prices paid, interest, taxes, and farm wage rates. ² Average annual quantities of farm food products purchased by urban wage-earner and clerical worker households (including those of single workers living alone) in 1959-61—estimated monthly. ³ Annual and quarterly data are on 50-State basis. ⁴ Annual rates seasonally adjusted third quarter. ⁵ Seasonally adjusted. ⁶ As of November 1, 1970. ⁷ As of March 1, 1970. ⁸ As of March 1, 1971.

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